



Team Name: Critical Care And Medicine Team Team Lead: Regional Director of Acute Care Approved by: Executive Director - Mid	Reference Number: CLI.5110.SG.006 Program Area: Critical Care Policy Section: Emergency
Issue Date: October 7 2015 Review Date: Revision Date:	Subject: Cast Removal Guideline

STANDARD GUIDELINE:

Cast Removal Guideline

PURPOSE:

To provide a guideline in the safe removal of fiberglass and plaster of paris casts.

PROCEDURE:

1. Cast removal is limited to Physicians, Nurse Practitioners and nurses who have had training and who have completed additional education requirements which include a review of this guideline and watching a cast removal video demonstration available at <https://www.youtube.com/watch?v=167xqGKS9hk> or by scanning the following QR code with an internet enabled phone or tablet:



2. Apply gloves and eye protection (optional).
3. The patient is positioned as to allow the saw operator easy access to the cast. Be sure to support the affected limb.
4. Consider gentle restraint for small children or confused patients. This should be done by staff whenever possible.
5. Offer the patient ear protection, as the saw is noisy.
6. Use a Skin Protection Strip, sliding it under the cast in the location that you will be cutting.
7. Hold the saw in your dominant hand with your fingers around the handle. The thumb or index finger touches the cast before the blade as a guide/guard.
8. With firm pressure, the saw is pressed into the cast perpendicular to the cast, until there is a slight give. Too deep a penetration is prevented by the thumb or forefinger pushing back. The tactile sensation of being through the rigid material takes some time to develop and will become second nature.
9. The saw operator will feel a lack of resistance with each up and down motion.
10. Long cuts are made by repetitive up and down penetration of the rigid material, moving in one direction.
11. The use of the saw is the same for bivalving, univalving, wedging and windowing of casts.
12. Use a cast spreading to spread open the cut length of cast.

13. Use blunt scissors to cut the under padding and stockinette.
14. Depending on the cast another cut may need to be made for removal.
15. Once removed, assess the condition of skin. Allow patient to wash and dry the skin. Apply lotion to the patient's skin.

Precautions:

1. Cast removal requires caution and patience.
2. The saw can be intimidating for children and adults. Be sure to explain the procedure to the patient and family.
3. Explain that the patient will feel heat due to the vibration of the blade through the cast material.
4. The saw should not be dragged in order to cut a line in the cast – this will cause damage to the patient's skin.
5. Do not cut over bony prominences.
6. Ensure blade is sharp; using a dull blade can cause added pressure, which can lead to a burn or laceration

EQUIPMENT/SUPPLIES:

1. Cast saw: an electrical powered saw, usually equipped with a vacuum. The fine tooth blade oscillates. The teeth of the blade are sharp, and with the motion of the blade, if light contact is made, the vibration causes no harm. If force is applied, a burn or cut can occur.
2. Skin Protection Strip
3. Blunt Tip Scissors
4. Cast Spreaders: used to spread the cast open after cutting
5. Plaster Shears
6. Eye protection can be considered for patient and saw operator.
7. Cast Removal Equipment Pictures (CLI.5110.SG.006.SD.01)

SUPPORTING DOCUMENTS:

[CLI.5110.SG.006.SD.01](#) Cast Removal Equipment Pictures

REFERENCES:

Canadian Society of Orthopaedic Technologists (CSOT)

Perry, A, G, Potter, P, A & Ostendorf, W, R. (2014). Clinical Nursing Skills and Techniques (8th edition). Elsevier Mosby: St. Louis, Missouri, (pg 257-258).